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3-way Ball Valves horizontal, DN15 - DN80*



Application field

Motorized 3-way Ball Valves are used as diverter valves for building control (e.g. heating, air-conditioning, solar) and sorts of industrial applications.

Available with **L-bore** (common input / output in center) or **T-bore** (common input / output left side or right side, selectable). Both types are particularly suitable for heat pumps due to dead center free switchover (no highpressure dysfunction, e.g. when switching between storage charge and heating).

The Valves are ready for operation with TICOVAL - Actuators EA80(R), EA100(R) and EA500(R).

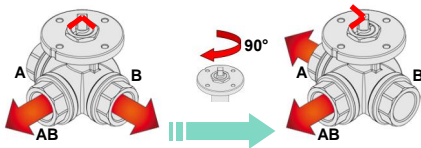
See reverse for overview of the appropriate Actuators, technical data in accordance with separate data sheets .

Quality features

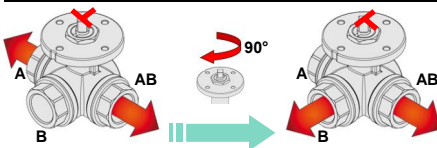
- available with L- or T-bore, thus common input / output selectable
- function free of water hammer
- seat leakage 0.0001 % of kvs-value
- flow possible in any direction
- mounting of Actuator in any 90° position possible (DN40 and DN50 any 180°)
- max. differential pressure with Actuator = PN10 (observe flow noise)
- maintenance-free
- stem seals can be replaced
- optimized for maximum flow, high kvs-value
- high quality design, high durability
- ball supported by 4 seats
- seats supported with O-rings for consistently low torque with guaranteed tightness
- EPDM-O-rings (NBR on request, e.g. for applications with mineral oil-based liquids)

Valve positions

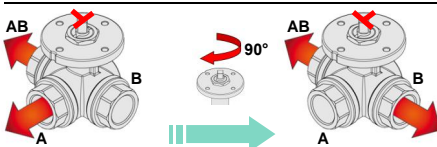
3-way horizontal L-bore



3-way horizontal T-bore, AB right side



3-way horizontal T-bore, AB left side



Product range 3-way horizontal / with female thread

Article-No. L-bore	Article-No. T-bore	DN	Thread
750.0224.000	750.0226.000	15	1/2"
750.0324.000	750.0326.000	20	3/4"
750.0424.000	750.0426.000	25	1"
750.0524.000	750.0526.000	32	1 1/4"
750.0624.000	750.0626.000	40	1 1/2"
750.0724.000	750.0726.000	50	2"
750.0824.000	750.0826.000	65	2 1/2"

Product range 3-way horizontal / with flanges PN16

Article-No. L-bore	Article-No. T-bore	DN	Dim.
750.0424.00F	750.0426.00F	25	1"
750.0524.00F	750.0526.00F	32	1 1/4"
750.0624.00F	750.0626.00F	40	1 1/2"
750.0724.00F	750.0726.00F	50	2"
750.0824.00F	750.0826.00F	65	2 1/2"

*DN80 3" only in vertical execution available, see data sheet 3-way Ball Valves vertical

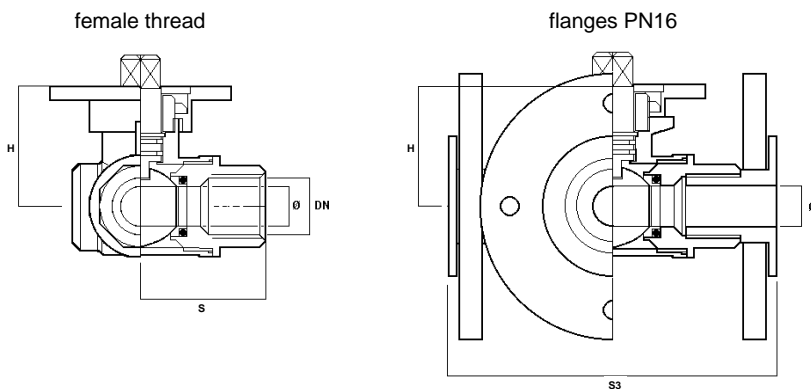
Technical data	
Max. pressure (valve body)	40 bar (threaded) 16 bar (flanged)
Max. differential Δp with Actuator	DN15 - DN32: 10 bar DN40 - DN65: 6 bar <i>(observe flow noise)</i>
Temperature range	-10°C to +120°C
Leakage on seats	0,0001% of kvs-value
Connections	female thread ISO 7/1 or 3x flanges PN16, rotating
Bore	reduced bore
Ball support	4 seats, with O-rings supported
Stem seals	2 x O-rings
Installation positions	upright to horizontal <i>(based on stem)</i>
Medium	hot / cold water , customary water additives and antifreeze ethylene and propylene-based / no mineral oil

Materials	
Valve body	brass 58, nickel plated
Ball	brass 58, chrome plat.
Stem	brass 58
Flanges	steel, galvanized
Seats	PTFE
Seals	EPDM (NBR on request)

⚠ Instructions of installation

- before commissioning check for proper operation (rotation / position of the ball / flow direction).
- mounting of Actuator on Valve in any 90° position possible (except 1 1/2" DN40 and 2" DN50 in any 180° position)
- see separate installation instructions!

Dimensions / kvs-values

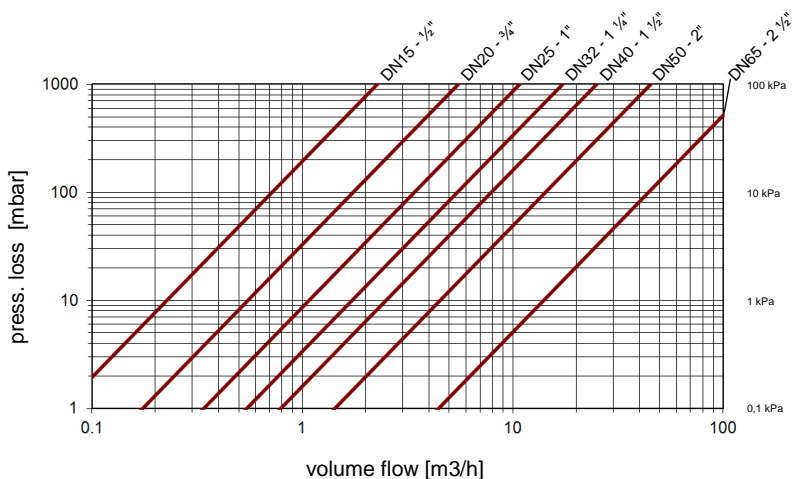


DN - Dim.	Ø bore [mm]	S [mm]	S2* [mm]	S3 [mm]	S4** [mm]	H [mm]	kvs-value
DN15 - 1/2"	10	41	82	-	-	44	2,3
DN20 - 3/4"	15	45	90	-	-	47	5,5
DN25 - 1"	20	53	106	148	89	56	11
DN32 - 1 1/4"	25	60	120	160	110	60	17
DN40 - 1 1/2"	32	71	142	187	116	79	25
DN50 - 2"	40	83	166	216	108	86	45
DN65 - 2 1/2"	50	97	194	240	120	91	140

*S2 = total width over two opposite connections (female thread types)

**S4 = depth over middle connection from middle axle (flange types)

Pressure loss diagram



Accessories

Pipe connector Typ 331 1/2" DN15 to 2" DN50 (see price list)

Combinations Actuators / Valves

	Range of Actuators (detailed information see corresponding data sheets)					
	EA80(R)		EA100(R)		EA500(R)	EA103 / EA502
	45 sec. - 9 nm	60 sec. - 13 nm	60 sec. - 20 nm	30 sec. - 17 nm	60 sec. - 60 nm	proportional signal
Dimensions	use for:					
DN15 - 1/2"	✓	✓	✓	✓		✓
DN20 - 3/4"	✓	✓	✓	✓		✓
DN25 - 1"	✓	✓	✓	✓		✓
DN32 - 1 1/4"		✓	✓	✓		✓
DN40 - 1 1/2"			✓	✓		✓
DN50 - 2"			✓	✓		✓
DN65 - 2 1/2"					✓	✓